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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

(SAN FRANCISCO DIVISION)

IN RE: TFT-LCD (FLAT PANEL) ANTITRUST LITIGATION

This Document Relates to:

ALL DIRECT PURCHASER ACTIONS

Master File No. M07-1827 SI

MDL No. 1827

DIRECT PURCHASER PLAINTIFFS' NOTICE OF MOTION AND MOTION FOR CLASS CERTIFICATION, AND MEMORANDUM OF LAW IN SUPPORT THEREOF

ORAL ARGUMENT REQUESTED

Date: August 6, 2009
Time: 4:00 p.m.
Courtroom: 10, 19th Floor

The Honorable Susan Illston

REDACTED VERSION

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NOTICE OF MOTION AND MOTION

TO THE PARTIES AND THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on August 6, 2009, at 4:00 p.m., before the Honorable Susan Illston, in the above-entitled Court, Direct Purchaser Plaintiffs ("plaintiffs") will and do hereby move the Court, pursuant to Federal Rule of Civil Procedure 23 ("Rule 23"), for an Order certifying a plaintiff class (the "Class") defined as follows:

> All persons and entities who, during the period January 1, 1996 through December 11, 2006, directly purchased a TFT-LCD panel or product containing a TFT-LCD panel in the United States from any defendant or any subsidiary or affiliate thereof, or any co-conspirator. Excluded from the Class are defendants, their parent companies, subsidiaries or affiliates, any co-conspirators, all governmental entities, and any judges or justices assigned to hear any aspect of this action.

Plaintiffs will also move the Court to appoint them as Class representatives and to appoint Richard M. Heimann and the law firm of Lieff, Cabraser, Heimann & Bernstein, LLP together with Bruce L. Simon and the law firm of Pearson, Simon, Warshaw & Penny, LLP as Direct Purchaser Co-Lead Class Counsel. This motion is based upon this Notice of Motion and Motion, the Memorandum of Law, the Report of Kenneth Flamm, Ph.D, the Declaration of Eric B. Fastiff, the accompanying Request for Judicial Notice, all exhibits and appendices to such documents, the pleadings and other documents on file in this case, and any argument that may be presented to the Court.

STATEMENT OF ISSUES TO BE DECIDED

The issues to be decided are:

(1) whether the Court should certify as a class action the proposed Class defined above and in the Second Amended Consolidated Complaint pursuant to Federal Rule of Civil Procedure 23;

(2) whether the Court should appoint plaintiffs as Class representatives; and

(3) whether the Court should appoint Interim Direct Purchaser Co-Lead Counsel as Class Counsel.

MEMORANDUM OF LAW

I. INTRODUCTION

This horizontal price-fixing case is ideally suited for prosecution as a class action. Defendants have engaged in a joint course of anticompetitive conduct, causing harm to all members of the Class. Proof of that conduct and harm will be the same for all Class members. Defendants entered into a conspiracy, the purpose and effect of which were to cartelize the TFT-LCD industry and to increase the price of TFT-LCD panels and finished TFT-LCD products throughout the world, including, specifically, in the United States. As plaintiffs allege, this conspiracy was in place by 1996, and lasted over 10 years. Throughout that period, members of the Class paid billions of dollars in supracompetitive prices for TFT-LCD panels and products.

The Court has accepted several guilty pleas from defendants and their executives in which they admitted their participation in this global price-fixing conspiracy. In doing so, they also admitted they harmed thousands of direct purchasers, the members of this Class. In entering the pleas, the Court noted the lack of restitution, and accepted the explanation contained in the joint sentencing memoranda that resolution will come through the civil actions. *See, e.g.*, Transcript of 1/14/09 Hearing, at 18:8-16 (Request for Judicial Notice, filed concurrently herewith, Exh. A) (criminal plea colloquy relating to Chunghwa guilty plea); Chunghwa, LG Display, and Sharp joint sentencing memoranda (Request for Judicial Notice, Exhs. B–D). A class action is the best mechanism to ensure that such restitution reaches those who paid overcharges as a result of defendants' conspiracy and to deter future misconduct.

The law in this Circuit favors class certification and disfavors weighing the merits of the case in determining whether a class should be certified. The length, depth, and organization of this admitted conspiracy demonstrate that defendants' illegal acts had a common impact on the prices of TFT-LCD Products. Defendants would not have participated in this type of conspiracy if they did not believe it would raise prices and affect the entire market. The conspiracy cut across all TFT-LCD Products no matter what size, resolution, or type. It controlled the prices and production of both panels and finished products. Economic analyses as well as the evidence show that the input cost of a panel in a finished product is significant and completely captured in

the price of the finished products, and a methodology for determining impact and damages is readily available, as shown in the report of Dr. Kenneth Flamm. Common issues predominate with regard to those who purchased the price-fixed products, making a class action appropriate.

Plaintiffs are direct purchasers of Thin Film Transistor-Liquid Crystal Display ("TFT-LCD") panels and products containing TFT-LCD panels (together, "TFT Products").[1] They bring this action on behalf of themselves and a proposed Class defined as follows:

> All persons and entities who, during the period January 1, 1996 through December 11, 2006, directly purchased a TFT-LCD panel or product containing a TFT-LCD panel in the United States from any defendant or any subsidiary or affiliate thereof, or any co-conspirator. Excluded from the Class are defendants, their parent - companies, subsidiaries or affiliates, any co-conspirators, all governmental entities, and any judges or justices assigned to hear any aspect of this action.

See Second Amended Direct Purchaser Plaintiffs' Consolidated Complaint (hereinafter "Complaint" or "Compl."), ¶ 67.

Plaintiffs allege a far-reaching conspiracy among defendants[2] to raise, fix, maintain, and stabilize artificially the price of TFT-LCD Products from January 1, 1996 through December 11, 2006 (the "Class Period") in violation of Section 1 of the Sherman Act. *Id.* ¶ 1. Plaintiffs allege, and defendants' documents confirm, that defendants carried out their price-fixing scheme by, among other things:

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[1] Plaintiffs are: (1) A.M Photo & Imaging Center, Inc.; (2) CMP Consulting Services, Inc.; (3) Crago, Inc.; (4) Home Technologies Bellevue LLC; (5) Nathan Muchnick, Inc.; (6) Omnis Computer Supplies, Inc.; (7) Orion Home Systems, LLC; (8) Phelps Technologies, Inc.; (9) Royal Data Services, Inc.; (10) Texas Digital Systems, Inc.; (11) Univisions-Crimson Holding, Inc.; and (12) Weber's World Company. Compl. ¶¶ 10-21.

[2] Defendants are: (1) (a) AU Optronics Corp. and (b) AU Optronics Corp. America: "***AU Optronics***"; (2) (a) Chi Mei Corp., (b) Chi Mei Optoelectronics Corp. ("CMO"), (c) CMO Japan Co., Ltd., (d) CMO USA, Inc., (e) Nexgen Mediatech, Inc., and (f) Nexgen Mediatech USA, Inc.: "***Chi Mei***"; (3) (a) Chunghwa Picture Tubes, Ltd. and (b) Tatung Co. of America, Inc.: "***Chunghwa***"; (4) Epson Electronics America, Inc.: "***Epson***"; (5) HannStar Display Corp.: "***HannStar***"; (6) (a) Hitachi, Ltd., (b) Hitachi Displays, Ltd., and (c) Hitachi Electronic Devices (USA), Inc.: "***Hitachi***"; (7) (a) LG Display Co., Ltd. and (b) LG Display America, Inc.: "***LG***"; (8) (a) Samsung Electronics Co., Ltd., (b) Samsung Electronics America, Inc., and (c) Samsung Semiconductor, Inc.: "***Samsung***"; (9) (a) Sharp Corp. and (b) Sharp Electronics Corp.: "***Sharp***"; and (10) (a) Toshiba Corp., (b) Toshiba America Electronic Components, Inc., (c) Toshiba America Information Systems, Inc., and (d) Toshiba Matsushita Display Technology Co., Ltd.: "***Toshiba***." *See* Compl. ¶¶ 21-54.

- Participating in surreptitious group and bilateral meetings with each other;
- Discussing supply and demand and general market conditions for TFT-LCD Products;
- Exchanging fabrication plant and production capacity information;
- Reaching agreements on target prices, floor prices, and price ranges for TFT-LCD Products;
- Reaching agreements to maintain or lower production capacity;
- Planning consistent public statements on anticipated supply and demand; and
- Disciplining new market entrants and pressuring them to abide by agreed-upon pricing and production.

Plaintiffs allege that defendants' conspiracy affected all direct purchasers of TFT-LCD Products sold in the United States because they paid prices that were higher than what they would have been absent the conspiracy. Defendants engineered a system that produced increases inconsistent with market forces, resulting in prices and price levels that were higher than they otherwise might have been. Even when prices declined from time to time, declines were relatively small and short-lived.

Certification of this Class finds overwhelming support in the case law. Over the past 30 years, courts in this district, together with others across the country, have certified classes in scores of horizontal price-fixing cases involving industries similar to and, in many cases, more complex than the TFT-LCD industry. *See, e.g., In re Static Random Access Memory (SRAM) Antitrust Litig.*, No. C 07-01819 CW, 2008 WL 4447592 (N.D. Cal. Sept. 29, 2008) ("*SRAM*");[3] *In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, No. M 02-1486 PJH, 2006 WL 1530166 (N.D. Cal. June 5, 2006) ("*DRAM*"); *In re Rubber Chemicals Antitrust Litig.*, 232

[3] The Ninth Circuit denied the *SRAM* defendants' Rule 23(f) petition to appeal the class certification order. *See* Order of Jan. 29, 2009, No. 08-80160 (9th Cir.).

F.R.D. 346 (N.D. Cal. 2005) ("*Rubber Chemicals*").[4] These are only the most recent decisions to agree with the decades of collective wisdom that horizontal price-fixing claims are well-suited for class treatment. *See also In re Vitamins Antitrust Litig.*, 209 F.R.D. 251 (D.D.C. 2002) ("*Vitamins*"); *In re Linerboard Antitrust Litig.*, 203 F.R.D. 197 (E.D. Pa. 2001) ("*Linerboard*"), *aff'd*, 305 F.3d 145 (3rd Cir. 2002).

For class certification purposes, this case presents issues no different from those addressed by dozens of other courts. Here, plaintiffs satisfy the requirements of Rule 23(a)—numerosity, commonality, typicality, and adequacy. They also satisfy the requirements of Rule 23(b)(3)—predominance and superiority. The elements of plaintiffs' claim—the existence of the conspiracy, its impact on the Class, and the resulting damages—arise from a single course of conduct and will be established through common proof. Therefore, common issues predominate.

Importantly, the existence of a TFT-LCD price-fixing conspiracy affecting direct purchasers in the United States is not open to dispute. Several defendants named in this action, including LG Display, Chunghwa, Sharp, and Hitachi, together with a number of their executives, have pled (or have agreed to plead) guilty and collectively agreed to pay $616 million in criminal fines (and to serve jail time). Declaration of Eric B. Fastiff in Support of Plaintiffs' Motion for Class Certification, hereinafter "Fastiff Decl.," ¶ 2. An amnesty applicant, and there is one here, is also guilty of price-fixing.[5] *Id.* ¶ 3-4. Even if defendants were to dispute the existence or scope of the conspiracy, plaintiffs' proof will be identical for each member of the proposed Class.

Plaintiffs' expert economist, Dr. Kenneth Flamm,[6] concludes in his accompanying report

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[4] *See also In re Ethylene Propylene Diene Monomer (EPDM) Antitrust Litig.*, No. 3:03md1542, 2009 WL 395131 (D. Conn. Feb. 13, 2009) ("*EPDM*"); *In re Urethane Antitrust Litig.*, 251 F.R.D. 629 (D. Kan. 2008) ("*Urethane II*"); *In re Pressure Sensitive Labelstock Antitrust Litig.*, No. 3:03-MDL-1556, 2007 WL 4150666 (M.D. Pa. Nov. 19, 2007) ("*Labelstock*"); *In re Bulk (Extruded) Graphite Prods. Antitrust Litig.*, No. Civ. 02-6030, 2006 WL 891362 (D.N.J. April 4, 2006).

[5] The United States Department of Justice ("DOJ") only offers amnesty to a company in an antitrust investigation if it is guilty. Fastiff Decl., ¶ 3.

[6] Dr. Flamm holds the Dean Rusk Chair in International Affairs and is a Professor at the Lyndon B. Johnson School of Public Affairs of the University of Texas at Austin. An expert in the fields of applied microeconomics and international trade, Dr. Flamm has studied the flat panel display industry for nearly 20 years for the United States government, private parties, and as the focus of his research and published scholarship. Dr. Flamm's *curriculum vitae* is attached to his

that the structure of the TFT-LCD industry is susceptible to cartel behavior and price-fixing. Assuming that plaintiffs' allegations are true, and testing those allegations with the facts adduced to date, Dr. Flamm shows how impact and damages can be established on a class-wide basis using statistical methods, and demonstrates that these methods are workable by successfully applying them to the non-aggregated transactional and pricing data that defendants produced.

Because of these overwhelming common issues, trying this case as a class action is superior to a series of separate trials, which would waste resources and risk inconsistent results. The superiority of class adjudication is further demonstrated by the trial plan that plaintiffs include with this motion. *See infra*, Part III.D. In sum, the Court should certify the Class. All the elements of Rule 23(a) and (b)(3) are satisfied. Nothing in this case justifies a departure from the legions of orders granting class certification motions in horizontal price-fixing cases.

II. FACTUAL BACKGROUND

A. Defendants Conducted One of the Most Successful – and Well Documented – Price-Fixing Conspiracies Ever

In the TFT-LCD industry, as in many other industries involving similar types of products, pricing under normal competitive conditions depends on the laws of supply and demand. In times of oversupply, prices are low. In times of short supply, prices are high. But here, during the Class Period, defendants formed a cartel, the purpose and effect of which was to interfere with the normal cycle of supply and demand for TFT-LCD Products, known in the TFT-LCD industry as the "crystal cycle." They agreed on prices. They agreed to limit production. They agreed to manipulate the supply of TFT-LCD Products so that prices remained artificially high. The cartel reached not only panels but also the finished products incorporating them. Defendants carried out the conspiracy through well-organized (and carefully recorded) group and bilateral meetings, as well as by communicating with each other by telephone and e-mail. Using these contacts, defendants made explicit agreements as to the price and supply of TFT-LCD panels and products. Compl. ¶¶ 106-134.

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report as Exhibit 1. *See* Report of Kenneth Flamm, Ph.D., April 3, 2009 (hereinafter cited as "Flamm").

Some group meetings among defendants were even formalized; they were known as "Crystal Meetings." *Id.* ¶ 107. These meetings were attended by employees at three levels of the defendants' corporations, including: "CEO" or "top" meetings, attended by Chief Executive Officers and/or Presidents; "commercial" or "operation" meetings, attended by management-level personnel; and working group meetings attended by lower-level sales and marketing personnel. When new manufacturers entered the market, defendants worked together to rein in and discipline these companies until they agreed to join the conspiracy. *Id.* ¶¶ 97, 107. Through these concerted actions, defendants succeeded in controlling the crystal cycle, and prices were consistently higher during the Class Period than they would have been without the price-fixing conspiracy. *Id.* ¶ 98. There is no evidence that any defendant withdrew from the conspiracy.

Apart from the guilty pleas, the direct evidence of conspiracy is extensive. Multiple defendants have already produced detailed written reports confirming at least 58 illicit meetings. According to the meeting reports, the members of the cartel disclosed to each other their prices for benchmark panels, such as 15-inch monitor panels or 21-inch television panels. After these exchanges, the cartel agreed on prices that members would charge the following month, and on how many panels each would produce. The participants then implemented these agreements, passing instructions throughout their corporate hierarchies and structures in order to accomplish the cartel's purpose—higher prices for TFT-LCD panels and products. Consider the following evidence:

- [redacted] (GRNE-B-0134455; Fastiff Decl., Exh. 1.)
- [redacted] (SAML-276862; Fastiff Decl., Exh. 2.)
- [redacted] (SAML-276903; Fastiff Decl., Exh. 3.)

- [redacted] (HEDUS00385426; Fastiff Decl., Exh. 4.)
- [redacted] (CPT0004008; Fastiff Decl., Exh. 5.)
- [redacted] (CPT0004012; Fastiff Decl., Exh. 6.)
- [redacted] (CPT0004015; Fastiff Decl., Exh. 7.)
- [redacted] (CPT0004035–40; Fastiff Decl., Exh. 8.)
- [redacted] (CPT0004043–45; Fastiff Decl., Exh. 9.)
- [redacted] (CMO-USA-CIV-0538529; Fastiff Decl, Exh. 10.)

[7] Defendants used acronyms to refer to various companies. "AU" refers to AU Optronics, "CMO" refers to Chi Mei, "CPT" refers to Chunghwa, "HS" refers to HannStar, "LGD" or "LG.P" refers to LG Displays, "SEC" refers to Samsung, and "SET" refers to Samsung Electronics Taiwan Branch.

- [redacted] (HSTAR_0087468; Fastiff Decl., Exh. 11.)
- [redacted] (SAML-311595–311602; Fastiff Decl., Exh. 12.)

These constitute only a few examples of the hundreds of pages of reports, letters, e-mails, and meeting minutes produced by defendants that memorialize their price-fixing activity.

The illicit agreements appear to have continued at least until the DOJ, the European Commission, the Korea Fair Trade Commission, and the Japanese Fair Trade Commission announced their investigations in December 2006. Compl. ¶¶ 135-137. Since then, Sharp, Chunghwa, and LG Display have pled guilty to fixing the prices of TFT-LCD panels sold in the United States. The DOJ has announced Hitachi will plead guilty as well. *See* Fastiff Decl., Exh. ¶ 2; Request for Judicial Notice, Exh. I (DOJ information against Hitachi). These guilty pleas confirm plaintiffs' allegations regarding how the conspiracy operated and establish a prima facie civil case against the defendants that pled guilty. 15 U.S.C. § 16(a).

B. Structure of the TFT-LCD Industry

Dr. Flamm's detailed analysis demonstrates the TFT-LCD industry is particularly susceptible to cartelization and to collusive agreements on price and supply harming all purchasers on a common basis in the form of higher prices.

1. TFT-LCD Panels and Products Are Interchangeable and Thus Susceptible to Price-Fixing

The Complaint and Dr. Flamm's report describe the TFT-LCD industry and manufacturing process in great detail. TFT-LCD panels are the primary building blocks for finished products that fall into three main categories: (1) televisions; (2) notebook, or laptop, computers; and (3) computer monitors. Flamm ¶ 57. They are also used in cell phones and other mobile devices. *Id.* ¶¶ 39, 74.

TFT-LCD panels are made by sandwiching liquid crystal compound between two pieces

of glass called substrates.[8] The resulting panel contains hundreds or thousands of electrically charged dots, called pixels, that form an image. Compl. ¶ 2. This panel is then combined with a backlight unit, a driver, and other equipment to create a "module," allowing the panel to operate and be integrated into a television, monitor, or other finished product.[9] *Id.* The glass substrates begin with a "motherglass," a sheet that is cut to make multiple panels. *Id.* ¶ 84. Panels are manufactured in fabrication plants, or "fabs," that are equipped to handle a motherglass of a particular size. *Id.* Technological innovations over time allowed defendants to begin the manufacturing process with increasingly large motherglass sheets. *Id.* ¶ 83. Each increase in motherglass size is described as a "generation"; the higher the generation, the larger the glass size. Yoong Ki Min (LG Display), 158:5-158:12 (Fastiff Decl., Exh. M); Flamm ¶¶ 25-28. Fabs are capable of producing a range of different panels in a single day. Yoong Ki Min (LG Display), 119:15-17, 124:22-125:6 (Fastiff Decl., Exh. M) (one fab can manufacture multiple sizes of panels at once).

Defendants established a number of industry organizations to set uniform technical attributes to facilitate the purchase and sale of TFT-LCD panels and products. These organizations, and the defendants themselves, typically use three attributes to categorize and compare panels across manufacturers: (1) size, measured in inches; (2) application, meaning the finished product; and (3) resolution, such as XGA or WXGA. Compl. ¶¶ 85-86; Flamm ¶ 42. From these common attributes, manufacturers develop product specifications (or "specs").[10] Size was a dominant factor in the operation of the conspiracy. An LG Display e-mail from 2002 references communications with "[a]ll of the competitors" and states: "Expected agreed-upon prices for September are forecasted at 15" $200, 17":$285-$290." GRNE0236894-95 (Fastiff Decl., Exh. 70).

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[8] Hannstar's October 7, 2003, offering circular describes how a TFT-LCD panel is manufactured. Arthur Lu (HannStar), Exhibit 2, pp. 58-59 (Fastiff Decl., Exh. 13).

[9] The key components of a module are the glass, the polarizer film, the driver IC, the screws, and the backlight. Fumiaki Kunimoto (Chi Mei), 26:1-27:16 (Fastiff Decl., Exh. J).

[10] Other attributes common to all TFT-LCD panels include brightness, glass thickness, and "greenness." Scott Birnbaum (Samsung), 195:9-12 (Fastiff Decl., Exh. A).

Further demonstrating the interchangeability of defendants' products, TFT-LCD customers often sourced the same panels from more than one manufacturer. Flamm ¶ 37. For example, [redacted] *See* Hiroyuki Morimitsu (Sharp), 56:25-57:11; Craig Hodowski (Epson), 51:19-23 (Fastiff Decl., Exhs. N and D). Moreover, the frequent use of "requests for quotation" ("RFQs") in the TFT-LCD industry shows that multiple manufacturers were capable of supplying essentially the same product.[11]

2. The TFT-LCD Market Is Highly Concentrated

Defendants collectively dominated the market for TFT-LCD panels and products during the Class Period. Compl. ¶ 87. Together, defendants controlled between 82% and 95% of the market from 1996 to 2006. Flamm ¶ 30. According to basic principles of economics, as market power becomes more concentrated companies can more easily assert collusive power over production, supply, and prices in that market. *Id.*

3. The Production of TFT-LCD Panels and Products Is Marked by Prohibitive Entry Barriers

Defendants' market power over TFT-LCD panels and products in the United States is garrisoned by high manufacturing and technological barriers to entry. Flamm ¶¶ 25-29. TFT-LCD fabrication plants are very expensive. *Id.* ¶¶ 25-27. High costs hindered potential new market entrants and solidified defendants' control over the industry. And when new TFT-LCD companies did enter the market, defendants pressured those new entrants until they were assimilated into the conspiracy. Compl. ¶¶ 94, 97.

4. TFT-LCD Panels Are the Principal Cost Component of Finished TFT-LCD Products

TFT-LCD panels are the most expensive and significant component of finished products.[12] The price of panels therefore directly correlates with the price of TFT-LCD finished

[11] *See* EEADOC 00002277–2282 (Fastiff Decl., Exh. 14) [redacted]; CMO-USA-CIV-0626165 (Fastiff Decl., Exh. 15) (example of Dell RFQ).

[12] Yoshinori Ishida (Hitachi), 29:7-30:8 (Fastiff Decl., Exh. F) [redacted]; Masahiro Yokota (Sharp), 110:17-112:18 (Fastiff Decl., Exh. V) (the cost of the panel or module accounts for between 70% and 80% of the final price of an LCD monitor); Roy Yeh (Nexgen), 41:18-42:8 (Fastiff Decl., Exh. U); Exhibit 3, p. 28 (Fastiff Decl., Exh. 17) [redacted]

products. *See, e.g.*, Edward Chen (Tatung), 60:3-9 (Fastiff Decl., Exh. B) [redacted]; Fundi Chen (HannStar), 46:3-15 (Fastiff Decl., Exh. C) [redacted].

It follows that supply and demand factors that affect panel prices also affect finished product prices. Flamm ¶¶ 56-61. And it comes as no surprise that defendants took the prices of finished products into consideration when they set panel prices. In fact, defendants relied on the "street price"—the retail price of the final product incorporating a panel—as an established benchmark for setting panel prices. Samsung's customers, for example, [redacted] In July 2003, [redacted][13] SAML523034 – 523039 (Fastiff Decl., Exh. 19).

5. Defendants Used Centralized and Formulaic Pricing

Defendants' TFT-LCD pricing was tightly controlled by their top executives and largely dictated by formulas set by the cartel. This meant the conspiracy could be enforced without having to inform every last sales representative of the price-fixing agreement or to include them in conspiratorial meetings or discussions. In fact, defendants' centralized and formulaic pricing gave the conspirators cover. Their sales representatives might appear to be competing, when in reality they had no authority to go below a certain price.[14]

[redacted]

[13] *See also* Marshall Pinder (Sharp), 217:15-219:4 (Fastiff Decl., Exh. P) [redacted]; WitsView Technology Corporation, Intelligence Report, May 2005, p. 12 (AUO-MDL-00050207 - 50265) (Fastiff Decl., Exh. 18) [redacted].

[14] *See* Marshall Pinder (Sharp), 153:16-21 (Fastiff Decl., Exh. P) [redacted]; Craig Hodowski (Epson), 67:22-68:12 (Fastiff Decl., Exh. D) [redacted].

III. ARGUMENT

A. Legal Standards for Class Certification

To be certified as a class action, this case must satisfy the four requirements of Rule 23(a) and the two requirements of Rule 23(b)(3). Under Rule 23(a), certification is appropriate if:

> (1) the class is so numerous that joinder of all members is impracticable, (2) there are questions of law or fact common to the class, (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class, and (4) the representative parties will fairly and adequately protect the interests of the class.

Rule 23(b)(3) provides that a class may be certified if:

> the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual class members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.

The Ninth Circuit has set out the following standard that applies to a motion for class certification:

> The court is bound to take the substantive allegations of the complaint as true, thus necessarily making the class order speculative in the sense that the plaintiff may be altogether unable to prove his allegations. While the court may not put the plaintiff to preliminary proof of his claim, it does require sufficient information to form a reasonable judgment. Lacking that, the court may request the parties to supplement the pleadings with sufficient material to allow an informed judgment on each of the Rule's requirements.

Blackie v. Barrack, 524 F.2d 891, 901 n.17 (9th Cir. 1975).

Under appropriate circumstances, a district court may certify a class based solely on a complaint's allegations. *Id.* at 900-01. The court may, but need not, request and consider material beyond the pleadings in reaching a decision. *Id.* The Supreme Court has adopted this approach. *General Tel. Co. of the Southwest v. Falcon*, 457 U.S. 147, 160 (1982) ("*sometimes* it may be necessary for the court to probe behind the pleadings before coming to rest on the certification question") (emphasis added). However, deciding whether to certify a class "does not permit or require a preliminary inquiry into the merits." *Blackie*, 524 F.2d at 901 (citing *Eisen v. Carlisle and Jacquelin*, 417 U.S. 156, 177-78 (1974)). At most, the Court may consider the nature of plaintiffs' claims and the evidence in order to judge whether plaintiffs' claims are susceptible to resolution on a class-wide basis. *See In re Citric Acid Antitrust Litig.*, No. 95-

1092, C-95-2963 FMS, 1996 WL 655791, at *2 (N.D. Cal. Oct. 2, 1996) ("*Citric Acid*"); *DRAM*, 2006 WL 1530166, at *3; *SRAM*, 2008 WL 4447592, at *2. While "some inquiry into the substance of a case may be necessary to ascertain satisfaction of the commonality and typicality requirements of Rule 23(a), it is improper to advance a decision on the merits to the class certification stage." *Moore v. Hughes Helicopters, Inc.*, 708 F.2d 475, 480 (9th Cir. 1983).[15]

The Supreme Court has long recognized that antitrust class actions like this one are a vital component of antitrust enforcement. *See generally Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 625 (1997) ("*Amchem*"); *Reiter v. Sonotone Corp.*, 442 U.S. 330, 344 (1979); *Hawaii v. Standard Oil Co. of Cal.*, 405 U.S. 251, 266 (1972). Consequently, when there is any doubt as to whether class certification is warranted, courts "resolve doubts in these actions in favor of certifying the class." *SRAM*, 2008 WL 4447592, at *2 (citation omitted). "Courts have stressed that price-fixing cases are appropriate for class certification because 'a class-action lawsuit is the most fair and efficient means of enforcing the law where antitrust violations have been continuous, widespread, and detrimental to as yet unidentified consumers.'" *Rubber Chemicals*, 232 F.R.D. at 350 (citation omitted).

B. Plaintiffs Satisfy the Requirements of Rule 23(a)

1. The Proposed Class Is Sufficiently Numerous

Plaintiffs meet the first requirement of Rule 23(a)—that the class proposed be "so numerous that joinder of all members is impracticable." Fed. R. Civ. P. 23(a)(1). To satisfy this requirement, "plaintiffs need not state the 'exact' number of potential class members, nor is there any specific magic number that is required." *DRAM*, 2006 WL 1530166, at *3 (citing *Rubber*

[15] Defendants may try to suggest that the granting of *en banc* review in *Dukes v. Wal-Mart, Inc.*, 509 F.3d 1168, 1179 (9th Cir. 2007), means that the law of the Ninth Circuit is unsettled and that decisions from other circuits, such as *In re Hydrogen Peroxide Antirust Litig.*, 552 F.3d 305 (3d Cir. 2008) ("*Hydrogen Peroxide*"), and *In re Initial Public Offering Securities Litig.*, 471 F.3d 24 (2d Cir. 2006) ("*IPO*"), should be considered by the Court. The granting of review in *Dukes* has no effect on the precedential weight of *Blackie*, *Moore*, and other decisions holding that a district court may not make preliminary findings on the merits of the plaintiffs' claims at the class certification stage. Moreover, plaintiffs here have offered far more than a "threshold showing" in support of class certification. *Compare Hydrogen Peroxide*, 552 F.3d at 321 (vacating class certification order because district court relied on just a "threshold showing"). The record before the Court includes extensive factual evidence from defendants' documents and expert testimony and analyses submitted by plaintiffs, including demonstrated econometric models.

Chemicals, 232 F.R.D. at 350-51). Rather, courts follow a common sense approach. If a class is geographically dispersed or class members are difficult to identify, then the class is generally numerous enough. *Id.*; *see also SRAM*, 2008 WL 4447592, at *3 (quoting 1 Newberg and Conte, *Newberg on Class Actions* § 3:3 (4th ed. 2002) ("*Newberg on Class Actions*")). Here, defendants' documents confirm that there are thousands of Class members throughout the United States who purchased TFT-LCD Products during the Class Period. Common sense dictates that joinder would be impracticable. Therefore, the Class is sufficiently numerous.

2. This Case Involves Common Questions of Law and Fact

Plaintiffs meet the second requirement of Rule 23(a)—that there exist "questions of law or fact common to the class." Fed. R. Civ. P. 23(a)(2). Courts construe the commonality requirement "permissively." *Hanlon v. Chrysler Corp.*, 150 F.3d 1011, 1019 (9th Cir. 1998). "The existence of shared legal issues with divergent factual predicates is sufficient, as is a common core of salient facts coupled with disparate legal remedies within the class." *Id.* "Only one significant issue of law or fact need be demonstrated to meet this requirement." *Mazza v. American Honda Motor Co.*, No. CV 07-7857, 2008 WL 5256432, at *5 (C.D. Cal. Dec. 16, 2008).

Courts have consistently held that "the very nature of a conspiracy antitrust action compels a finding that common questions of law and fact exist." *DRAM*, 2006 WL 1530166, at *3; *Rubber Chemicals*, 232 F.R.D. at 351. This is because the proof of the existence, scope, effectiveness, and implementation of a conspiracy to manipulate prices is identical for each class member. *DRAM*, 2006 WL 1530166, at *4.

Here, there are many questions of law and fact common to this Class, including:

(1) whether defendants engaged in a contract, combination, and/or conspiracy to fix, raise, maintain, or stabilize prices of TFT-LCD Products sold in the United States;

(2) whether the contract, combination, or conspiracy violated Section 1 of the Sherman Act;

(3) the duration of the illegal contract, combination, or conspiracy;

(4) whether defendants' conduct caused the prices of TFT-LCD Products sold in the United States to be set at artificially high, or non-competitive, levels; and

(5) whether Class members were injured by defendants' conduct, and, if so, the appropriate class-wide measure of damages.

Compl. ¶ 70; *see infra*, Part III.C. These same questions have been routinely found to satisfy the commonality requirement in other horizontal price-fixing class actions. *See, e.g.*, *DRAM*, 2006 WL 1530166, at **3-4; *Rubber Chemicals*, 232 F.R.D. at 351; *Citric Acid*, 1996 WL 655791, at *3. The questions all revolve around the existence, scope, effectiveness, and implementation of defendants' conspiracy, and are central to plaintiffs', and each Class member's, claims. The issues raised by defendants' affirmative defenses are also common to the Class. *See In re NASDAQ Market-Makers Antitrust Litig.*, 172 F.R.D. 119, 123 (S.D.N.Y. 1997). Thus, plaintiffs satisfy the commonality requirement of Rule 23(a)(2).

3. Plaintiffs' Claims Are Typical of the Claims of the Class

Plaintiffs meet the third requirement of Rule 23(a)—that their claims be typical of those of the Class. Fed. R. Civ. P. 23(a)(3). A plaintiff's claim is typical when it "arise[s] from the same event, practice or course of conduct that gives rise to the claims of absent class members and if their claims are based on the same legal or remedial theory" as class members' claims. *DRAM*, 2006 WL 1530166, at *4.

As with commonality, courts have found the typicality requirement to be easily satisfied in horizontal price-fixing cases because "in instances wherein it is alleged that the defendants engaged in a common scheme relative to all members of the class, there is a strong assumption that the claims of the representative parties will be typical of the absent class members." *In re Catfish Antitrust Litig.*, 826 F. Supp. 1019, 1035 (N.D. Miss. 1993) ("*Catfish*"); *see also Citric Acid*, 1996 WL 655791, at *3 ("Because plaintiffs and all class members share these claims and this theory [defendants conspired to fix prices], the representatives' claims are typical of all.").

Indeed, the Court should reject out of hand any argument that depends on purported factual differences among the Class members' individual transactions. The typicality inquiry focuses on the conduct of the defendants, not on their individual contracts with plaintiffs. *DRAM*,

2006 WL 1530166, at *5. In *DRAM*, the court rejected the defendants' arguments that plaintiffs' claims were not typical because there were different types of DRAM purchased, different categories of customers that purchased DRAM, and different sales channels through which customers bought DRAM. The plaintiffs' claims were typical, the court found, because they all arose from allegations of purchases of products at prices artificially inflated by the anticompetitive conspiracy. *Id.* at **4-6. "Typicality is usually satisfied in a horizontal antitrust conspiracy case, even though a plaintiff may have purchased different product types or quantities or received different prices, or a plaintiff purchased from one defendant but not another." *Labelstock*, 2007 WL 4150666, at *10. Even "pronounced factual differences" will "generally not" preclude a finding of typicality so long as "there is a strong similarity of legal theories." *Bulk Graphite*, 2006 WL 891362, at *5 (certifying class; named plaintiffs represented only one customer category of three, but prices in all categories were allegedly inflated by the same price-fixing conspiracy) (quoting *Baby Neal v. Casey*, 43 F.3d 48, 58 (3d Cir. 1994)).

Here, plaintiffs' claims are typical of the claims of the Class even if plaintiffs operated different businesses, purchased varying products, or engaged in dissimilar communications with defendants. The cartel set supracompetitive prices. *See* Part II.A, *supra*. Defendants' price-fixing scheme is the linchpin of the claims of every named plaintiff and Class member, considering they all purchased the price-fixed products directly from defendants or defendants' affiliates and co-conspirators in the conspiratorially affected market and were harmed as a result. Simply because some of the plaintiffs may have purchased TFT-LCD products instead of TFT-LCD panels does not defeat class certification. Indeed, defendants' concerted acts were meant to raise, fix, and stabilize the prices of both TFT-LCD panels and TFT-LCD products. As the evidence shows, the prices of panels are directly correlated with the prices of products, and the conspiracy caused the prices of both to increase. *See* Flamm ¶¶ 56-61.[16] Furthermore, certain

[16] Judge Alsup's recent holding in *In re Graphics Processing Units Antitrust Litigation*, 253 F.R.D. 478 (N.D. Cal. 2008), that plaintiffs were not typical of absent class members is inapposite for several reasons. Chief among these reasons is that the plaintiffs there, who only bought graphics cards, failed to allege a conspiracy extending to the products the absent class members purchased; the plaintiffs here represent class members who purchased TFT-LCD panels as well as TFT-LCD products, and the conspiracy affected the markets for both. *Id.* at 489-90.

plaintiffs' purchases of TFT-LCD products from defendants' agents as well as distributors and other sales affiliates of the defendants, rather than from the affiliate of the defendant that manufactured the product, does not undermine typicality. *See Royal Printing Company v. Kimberly-Clark Corp.*, 621 F.2d 323 (9th Cir. 1980) ("*Royal Printing*").[17]

4. Plaintiffs Will Fairly and Adequately Represent the Interests of the Class

Plaintiffs meet the fourth requirement of Rule 23(a)—that the named plaintiffs "fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). To satisfy this requirement, plaintiffs must: (1) not have interests that are antagonistic to or in conflict with the interests of the class; and (2) be represented by counsel able to vigorously prosecute the interests of the class. *See SRAM*, 2008 WL 4447592, at *4 (citing *Staton v. Boeing Co.*, 327 F.3d 938, 957-58 (9th Cir. 2003)).

First, the interests of the plaintiffs do not conflict with those of absent Class members. To the contrary, the interests of plaintiffs and Class members are entirely aligned. Plaintiffs allege that all Class members paid artificially inflated prices for TFT-LCD Products during the Class Period as a result of defendants' conspiracy, that all suffered similar injury in the form of higher prices because of that conspiracy, and that all seek the same relief in the form of overcharge damages. In short, plaintiffs and Class members share an identical interest in proving defendants' liability. When they prove their own claims, plaintiffs will necessarily be proving the claims of their fellow Class members.

A proposed class representative is qualified to serve unless "she is 'startlingly unfamiliar' with the case." *Citric Acid*, 1996 WL 655791, at *4 (quoting *Greenspan v. Brassler*, 78 F.R.D. 130, 133-34 (S.D.N.Y. 1978)). The plaintiffs who have already been deposed have shown a great deal of knowledge about this proceeding. One proposed representative, Keith Stanze of Orion

[17] In *Royal Printing*, the Ninth Circuit held that a plaintiff who purchased paper from the subsidiary of a defendant manufacturer had standing to assert antitrust claims against the defendant manufacturer. 621 F.2d at 326. Similarly, a plaintiff may recover overcharges paid to a defendant's co-conspirators, for "conspirators are mutual agents and each is liable for the acts of the other." *In re Coordinated Pretrial Proceedings in Petroleum Prods. Antitrust Litig.*, 497 F. Supp. 218, 225-26 (C.D. Cal. 1980).

Home Systems, LLC, testified that he has spent between 60 and 70 hours on the case so far. Keith Stanze, 36:4-37:2 (Fastiff Decl., Exh. R). Some of the proposed representatives are large direct purchasers of TFT-LCD Products, while others purchased fewer products from defendants. This diversity makes them more, not less, suited to represent the interests of the Class. *See Citric Acid*, 1996 WL 655791, at *5 ("Having representatives who were small or sporadic purchasers, who have since stopped using citric acid, or who bought from cooperatives assures that class members in similar circumstances will have their interests protected."); *Urethane II*, 251 F.R.D. at 644 (proposed representatives who were larger distributors had "the same interests as the other class members in proving that they were all damaged by defendants' alleged price-fixing conspiracy with respect to the polyether polyol products."). The representatives here are similarly adequate. Every proposed Class representative has produced invoices or other documents showing that it purchased at least one TFT-LCD Product directly from a defendant or co-conspirator in this action.[18] The chart attached hereto as Appendix A describes the plaintiffs' purchases, including the types of products purchased and from whom the products were purchased.[19]

Second, plaintiffs have retained highly skilled counsel with extensive experience in prosecuting antitrust cases, class actions and other complex cases to successful resolutions, including trials. Under Rule 23(c)(1)(B), "[a]n order certifying a class action . . . must appoint class counsel under Rule 23(g)." In appointing class counsel, courts are to consider: "(i) the work counsel has done in identifying or investigating potential claims in the action, (ii) counsel's experience in handling class actions, other complex litigation, and claims of the type asserted in the action, (iii) counsel's knowledge of the applicable law, (iv) the resources counsel will commit to representing the class." Fed. R. Civ. P. 23(g)(1)(A).

[18] Plaintiff Texas Digital Systems, Inc., which was added to this case on March 3, 2009, was not served with discovery until March 18, 2009. Texas Digital Systems, Inc. will be producing written discovery responses on or before April 17, 2009.

[19] Representative invoices of these purchases are attached to the Fastiff Declaration as Exhibits 20 through 31.

On July 13, 2007, the Court appointed Bruce Simon of Pearson, Simon, Warshaw & Penny, LLP ("PSWP") and Richard Heimann of Lieff, Cabraser, Heimann & Bernstein, LLP ("LCHB") as Interim Co-Lead Counsel. Pretrial Order No. 3, Order Appointing Interim Lead Class Counsel, No. M07-1827 SI, Docket No. 224. Mr. Simon (and PSWP) and Mr. Heimann (and LCHB) now seek appointment as Class Counsel. Both counsel and firms have undertaken the responsibilities assigned to them by the Court. They have directed the efforts of other plaintiffs' counsel and have vigorously pursued the litigation on behalf of plaintiffs and the proposed Class. Counsel have engaged in extensive investigations and have successfully litigated motions, including defendants' motions to dismiss. They have retained one of the leading experts on economic issues in technology markets, Dr. Flamm, and have efficiently managed all other aspects of the litigation. Counsel continue to devote the substantial resources necessary to prosecute this action on behalf of the Class.

Because plaintiffs have no interests that are antagonistic to the Class, and because they are represented by qualified counsel, they meet the adequacy requirement for class certification.

C. This Action Meets the Requirements of Rule 23(b)(3)

1. Common Questions of Law and Fact Predominate Over Individual Questions

"Predominance is a test readily met in certain cases alleging consumer or securities fraud or violations of the antitrust laws." *Amchem*, 521 U.S. at 625; *see In re Brand Name Prescription Drugs Antitrust Litig.*, No. 94 C 897, 1994 WL 663590, at *6 (N.D. Ill. Nov. 18, 1994) ("*Brand Name Prescription*") (certifying class of direct purchasers, identifying the "common, predominating question of whether defendants conspired to fix prices").

Plaintiffs must establish that issues common to the Class will predominate with respect to their proof of the four elements of their antitrust claim for violation of Section 1 of the Sherman Act: (1) that there was a conspiracy to fix prices in violation of the antitrust laws; (2) that plaintiffs suffered antitrust injury (*i.e.*, "impact") as a result of defendants' unlawful activity; and (3) the amount of damages sustained as a result of the antitrust violations. *See DRAM*, 2006 WL 1530166, at *7. Common questions predominate with respect to each element because plaintiffs

will establish each element through "generalized proof" which applies to the Class as a whole. *See id.* at *9.[20]

a. Because Plaintiffs Purchased TFT-LCD Products at Fixed Prices, the Court (at Class Certification) and the Jury (at Trial) Can and Should Presume Antitrust Injury or Impact

Plaintiffs' overcharge theory accords with the "general rule" that "an illegal price fixing scheme presumptively impacts upon all purchasers of a price-fixed product in a conspiratorially affected market." *Citric Acid*, 1996 WL 655791, at *7 (quotation omitted). "Because the gravamen of a price-fixing claim is that the price in a given market is artificially high, there is a presumption that an illegal price-fixing scheme impacts upon all purchasers of a price-fixed product in a conspiratorially affected market." *Rubber Chemicals*, 232 F.R.D. at 352 (quotations and citations omitted). Thus, "it is widely recognized that the very nature of horizontal price-fixing claims are particularly well suited to class-wide treatment because of the predominance of common questions." *Urethane II*, 251 F.R.D. at 635. The evidence in this case shows that the defendants' anticompetitive conduct raised prices paid by all purchasers in the conspiratorially affected market, justifying a presumption of impact. *See Catfish*, 826 F. Supp. at 1041 ("In an illegal price fixing scheme, there is a presumption that all purchasers will be impacted/injured by having to pay the higher price.").

b. The Existence of Defendants' Cartel and Defendants' Acts in Furtherance of the Conspiracy to Fix Prices Are Predominant Common Issues

If each Class member were required to prove its claim individually at trial, each would show that defendants organized and operated the same global TFT-LCD price-fixing cartel. Each Class member would submit the same kind of proof, including evidence of explicit agreements among defendants, evidence of the Crystal Meetings, evidence of bilateral agreements, and

[20] The purpose of the predominance inquiry is to allow the Court to determine "whether the proposed class is sufficiently cohesive to warrant adjudication by representation." *Amchem*, 521 U.S. at 623. "The predominance requirement only calls for predominance, not exclusivity, of common questions." *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 140 (2d Cir. 2001) ("*Visa Check/MasterMoney II*"). Some factual variation among class members' claims will not prevent class certification. *Thomas & Thomas Rodmakers, Inc. v. Newport Adhesives & Composites, Inc.*, 209 F.R.D. 159, 167 (C.D. Cal. 2002) ("*Thomas & Thomas*").

evidence of other communications among defendants. A prime example of such direct evidence of conspiracy is the written record [redacted], which states:

[redacted]

CPT0004015 (Fastiff Decl., Exh. 7) (emphasis added). This is the stuff of collusive behavior. Such proof, along with other direct evidence of the conspiracy, is entirely common to the Class and supports a finding of predominance. *See SRAM*, 2008 WL 4447592, at **9-10 (common liability issues predominated because common evidence regarding alleged conspiracy, including written records of in-person, telephone, and e-mail communications, would be necessary to prove claims of all class members).

To demonstrate that the TFT-LCD price-fixing conspiracy existed, plaintiffs will necessarily focus on the conduct of the defendants, not the conduct of individual Class members. *See In re Corrugated Container Antitrust Litig.*, 80 F.R.D. 244, 250 (S.D. Tex. 1978) ("The court is persuaded that the conspiracy issue—whether price information was exchanged; if it was, with what intent; whether action was taken by the defendants based upon such exchanges, etc.—is susceptible of generalized proof, since it deals primarily with what the defendants themselves did and said."); *see also Meijer, Inc. v. Abbott Laboratories*, No. C 07-5985 CW, 2008 WL 4065839, at *9 (N.D. Cal. Aug. 27, 2008) ("*Meijer*"); *Citric Acid*, 1996 WL 655791, at *7.

Here, plaintiffs allege that defendants' conspiracy inflated and maintained at artificially

high levels the prices charged for TFT-LCD Products sold in the United States during the Class Period. To prove their allegations, all Class members will show that defendants conspired to fix prices in violation of the Sherman Act, and will submit common proof of how defendants implemented and enforced their scheme. Thus, common liability issues predominate.

c. Common Impact Issues Predominate

Through generalized proof, plaintiffs will also prove that they and each member of the Class suffered impact (antitrust injury). Proof of antitrust injury requires a showing of some injury to "business or property" due to a defendant's antitrust violations. *See Reiter*, 442 U.S. at 337-41; *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 126 (1969). For class certification purposes, plaintiffs need only show that the fact of injury can be proved through common evidence. *SRAM*, 2008 WL 4447592, at *5; *Meijer*, 2008 WL 4065839, at *8.

Common impact issues predominate in this case. Plaintiffs will show that all the members of the Class were adversely affected by the conspiracy using evidence entirely common to the Class. In addition to the Complaint and the evidence produced by defendants to date, the analysis conducted by Dr. Flamm demonstrates that plaintiffs can show at trial that defendants' manipulation of TFT-LCD prices harmed all of the members of the Class in a common fashion. *See infra*, Parts III.C.3.e and III.C.5; Flamm ¶¶ 74-78 (hedonic analysis of common impact), 79-84 (matched model index).

Antitrust injury, particularly in a price-fixing case, is an issue common to the class because it is readily determined based on a common evidentiary showing. *See In re Master Key Antitrust Litig.*, 528 F.2d 5, 12 n.11 (2d Cir. 1975) ("If [plaintiffs] establish at the trial for liability that the [defendants] engaged in an unlawful national conspiracy which had the effect of stabilizing prices above competitive levels, and further establish that [plaintiffs] were consumers of that product, we would think that the jury could reasonably conclude that [defendants'] conduct caused injury to each [plaintiff]"); *J. Truett Payne Co., Inc. v. Chrysler Motors Corp.*, 451 U.S. 557, 567 (1981) (jury may infer antitrust injury).

2. Dr. Flamm Has Demonstrated Methodologies to Prove Impact on a Class-Wide Basis

Following dozens of cases on this point, the courts of this district have repeatedly held:

> [D]uring the class certification stage, the court must simply determine whether plaintiffs have made a sufficient showing that the evidence they intend to present concerning antitrust impact will be made using generalized proof common to the class and that these common issues will predominate. . . . Plaintiffs need only advance a plausible methodology to demonstrate that antitrust injury can be proven on a class-wide basis.

DRAM, 2006 WL 1530166, at *9 (internal quotation marks and citations omitted); *see generally Citric Acid*, 1996 WL 655791, at **6-8. Importantly, "[o]n a motion for class certification, the Court only evaluates whether the method by which plaintiffs propose to prove class-wide impact could prove such impact, not whether plaintiffs in fact can prove class-wide impact." *In re Magnetic Audiotape Antitrust Litig.*, No. 99 CIV. 1580, 2001 WL 619305, at *4 (S.D.N.Y. June 6, 2001) ("*Magnetic Audiotape*").[21]

Plaintiffs will rely on an overcharge analysis to prove antitrust injury. It is well-settled that an overcharge analysis constitutes an acceptable method for establishing injury in fact on a class-wide basis. *See SRAM*, 2008 WL 4447592, at **6-7; *Cardizem*, 200 F.R.D. at 302; *In re Visa Check/Mastermoney Antitrust Litig.*, 192 F.R.D. 68, 82-83, 85 (E.D.N.Y. 2000) ("*Visa Check/Mastermoney I*"); *In re Carbon Black Antitrust Litig.*, No. Civ.A.03-10191 (DPW), 2005 WL 102966, at **16-17 (D. Mass. Jan. 18, 2005) ("*Carbon Black*"). Such an analysis does not depend on any individualized questions. *See VisaCheck/Mastermoney I*, 192 F.R.D. at 82-83.

Plaintiffs and their economic expert, Dr. Flamm, set forth standard and widely accepted methodologies. First, Dr. Flamm undertook an extensive analysis of the structure of the TFT-LCD industry. Based on that analysis, he has identified a number of characteristics that make the industry highly susceptible to cartelization and price-fixing. Flamm ¶¶ 24-52. He further

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[21] A plaintiff is not required to show that "the fact of injury actually exists for each class member." *In re Cardizem CD Antitrust Litig.*, 200 F.R.D. 297, 307 (E.D. Mich. 2001) ("*Cardizem*"); *see also Meijer, Inc. v. Warner Chilcott Holdings Co. III, Ltd.*, 246 F.R.D. 293, 310 (D.D.C. 2007) ("the inability to show injury as to a few does not defeat class certification where the plaintiffs can show widespread injury to the class").

concludes such price-fixing would have injured all who directly purchased TFT-LCD panels and products from defendants and their co-conspirators. *Id.* ¶ 84.

Analyzing industry data and defendants' data, Dr. Flamm has made the following findings:

- TFT-LCD Products are standardized products that have a high degree of substitutability (*Id.* ¶¶ 34-47);
- TFT-LCD panels are the main cost component of TFT-LCD televisions and monitors, and a significant cost component of other finished TFT-LCD products (*Id.* ¶ 57);
- Defendants dominated the market for TFT-LCD Products during the Class Period (*Id.* ¶ 30); and
- The TFT-LCD industry is marked by high barriers to entry (*Id.* ¶¶ 25-29).

Courts routinely find economic structural analyses based on these factors sufficient to demonstrate common impact. *See, e.g.*, *DRAM*, 2006 WL 1530166, at **8-9 (finding report of Dr. Roger Noll performing similar analysis of DRAM industry sufficient to show class-wide impact); *EPDM*, 2009 WL 395131, at **10-24 (finding expert's working econometric model sufficient to show class-wide impact on direct purchasers of EPDM).[22]

Dr. Flamm also performed two empirical analyses of price indices based on defendants' transactional data. These hedonic and matched model analyses show that prices for all TFT-LCD panels and products were highly correlated across all defendants, with prices moving together at similar amounts and at similar points in time during the Class Period. Flamm ¶ 84. These type of analyses have been accepted in other cases. *See, e.g.*, *Freeland v. AT&T Corp.*, 238 F.R.D. 130, 149 & n.15 (S.D.N.Y. 2006) (endorsing hedonic regression analysis because it "incorporate[s]

[22] This case is more like the direct purchaser class certified in the *DRAM* litigation than like the class of assorted state government indirect purchasers of *DRAM* that Judge Hamilton declined to certify in *California v. Infineon Technologies AG*, No. C06-4333 PJH, 2008 WL 4155665 (N.D. Cal. Sept. 5, 2008) ("*Infineon Technologies*"). Defendants may try to confuse the issues by making much of the fact that the plaintiffs in *Infineon Technologies* relied on a report by Dr. Flamm—but those plaintiffs faced a different burden than the plaintiffs do here. This class should be certified for many of the same reasons that Judge Hamilton certified the *DRAM* direct purchaser class. *See DRAM*, 2006 WL 1530166.

adjustments for changes in the characteristics of the products over time"); *Labelstock*, 2007 WL 4150666, at *19 (certifying class on price-fixing claim where plaintiffs' expert testified it was "readily apparent" from price indices that "these prices are moving similarly over time").[23]

It is anticipated that defendants will argue that, after the Third Circuit's decision in *Hydrogen Peroxide*, the class certification standard has somehow changed in this forum. However, despite their likely efforts to try to turn class certification into a trial on the merits or a summary judgment argument, the law in the Ninth Circuit is clear that the Court should not make a determination on the merits of the case during class certification nor should it weigh the evidence of the respective experts. Undoubtedly, defendants will present their own expert, who will attempt to ignore the now-admitted conspiracy. The logical consequence of their anticipated arguments regarding out-of-circuit *Hydrogen Peroxide* would be a lengthy delay of class certification, postponing that decision until after decisions on the merits. But this runs counter to the clear instruction of Rule 23 that class certification should be heard expeditiously.

Here, plaintiffs have offered additional proof of class-impact through the report of Dr. Flamm, who has taken the extra steps of carrying out his methodologies showing common impact and describing the extensive data that supports his conclusions. Though not required at this juncture under applicable Ninth Circuit law or out-of-circuit law, Dr. Flamm has gone beyond describing widely accepted modes of economic analysis and statistical methodologies. He has also applied the methodologies to the facts of this case and the data defendants have provided to date. Flamm ¶¶ 74-84. Dr. Flamm also identifies working methodologies that, when defendants' data productions are complete, will enable further statistical modeling of class-wide impact, as well as the amount of overcharge caused by the conspiracy. *Id.* ¶¶ 85-102. The five possible models are "before and after," "benchmark," "cost-based," "structural supply and demand," and "reduced form." *Id.* ¶¶ 85-90. Dr. Flamm believes that the latter three methodologies can all be employed using data commonly maintained by producers in the TFT-LCD industry. *Id.* ¶¶ 91-

[23] *See also Bulk Graphite*, 2006 WL 891362, at **12-13 (class-wide impact shown where expert found that prices increases were closely correlated in time and amount); *Magnetic Audiotape*, 2001 WL 619305, at *5 (class-wide impact shown where expert's empirical analysis of defendants' sales data disclosed that prices moved together over time).

102. By presenting working econometric models that can be used to prove class-wide impact, plaintiffs have gone much further than the plaintiffs in *Hydrogen Peroxide*. *See EPDM*, 2009 WL 395131, at *23 n.11 (expert's working econometric model demonstrating common impact based on proof common to the class satisfies *Hydrogen Peroxide* standard).

3. There Is Substantial Evidence Common to the Class to Prove Impact

a. TFT-LCD Panels and Products Are Interchangeable

As courts have long recognized, common impact is much easier to show when the products made by different defendants are essentially uniform. *See, e.g., Bulk Graphite*, 2006 WL 891362, at *14 (certifying class that alleged price-fixing of products that "exhibit fungible, 'commodity-like' characteristics, the only competition among manufacturers existing on the basis of price"); *Urethane II*, 251 F.R.D. at 634 (certifying class that alleged price-fixing of "interchangeable, commodity-like products"); *DRAM*, 2006 WL 1530166, at *8.

The record is replete with such evidence here. A 19-inch panel made by Chi Mei [redacted]. *See* TUSP00008684 (Fastiff Decl., Exh. 32) (Tatung informed customer of change from a CPT panel to a CMO panel). Hitachi has purchased TFT-LCD modules [redacted]. *See* Nobuhiko Kobayashi (Hitachi), 14:6-15:25 (Fastiff Decl., Exh. I). Similarly, Sharp manufactured and sold TV panels to [redacted]. *See* Hiroyuki Morimitsu (Sharp), 56:2-7 (Fastiff Decl., Exh. N). As this evidence shows, TFT-LCD Products are standardized and substitutable. Flamm ¶¶ 34-37.

In large part through concerted acts, defendants were able to standardize the attributes of TFT-LCD panels, modules, and products, making them highly interchangeable. As a result, TFT-LCD Products were sold, marketed, and priced like commodities. Customers and suppliers alike treated as substitutes panels that had the same application, size, and resolution characteristics, regardless of manufacturer. The minutes of a meeting held at Epson [redacted] EEADOC 00007736–

40 (Fastiff Decl., Exh. 33) (emphasis added). Because TFT-LCDs are fungible, with a standardized hierarchy of "add-on" features, defendants were able to develop a limited number of shared price points. Flamm ¶¶ 41, 47. At regular intervals, defendants provided panel sales data consistent with these limited categories—price, panel size, and resolution—to market research firms, which used the data to create industry-wide price reports that cross-referenced substitute panels made by different defendants.[24] *Id.* ¶¶ 50, 52.

Defendants, in turn, used these reports (together with internally created compilations) as reference points for establishing base prices for their equivalent panels and products. This process, which did not require detailed or individualized product specifications, was known as "benchmarking."[25] *Id.* ¶¶ 45, 54. Panel size appears to have been the most important characteristic to benchmark. Certain sized panels were so common that no description beyond the panel size was necessary to identify essential attributes. The same price points and panel categories were used by defendants to negotiate contracts with customers and to monitor and enforce the conspiracy, including through contractual price protection clauses known as "most favored customer" clauses.[26] *See id.* ¶¶ 48-51; *see also infra*, p. 29 fn. 36.

As with all commodity-like products, within each standard-size product category there was considerable supply-side substitutability. Flamm ¶¶ 35-40. Facilitating this were defendants' interrelated business arrangements (including joint ventures[27] and cross-licensing

[24] *See* AUO MDL00016225–16272 (Fastiff Decl., Exh. 34) [redacted]; CMO-USA-CIV-0462779 (Fastiff Decl., Exh. 35) [redacted].

[25] A HannStar executive explained the use of benchmarks [redacted] Fundi Chen (HannStar), 84:3-19 (Fastiff Decl., Exh. C); *see also* Roy Yeh (Nexgen), 25:18-26:5 (Fastiff Decl., Exh. U) [redacted]

[26] *See* Yoong Ki Min (LG Display), 100:12-101:23 (Fastiff Decl., Exh. M) [redacted]; GRNE-N-0008084–8086 (Fastiff Decl., Exh. 36) [redacted].

[27] *See* Tadashi Yamada (Hitachi), 58:13-59:4 (Fastiff Decl., Exh. S) [redacted]

arrangements),[28] and the well-established relationships and regular communications between the executives of these erstwhile competitors.[29] Compl. ¶¶ 89, 92; Flamm ¶ 31. Defendants frequently purchased or traded each others' TFT-LCD panels for use in their own finished products.[30] In addition, defendants could change their production plans, and did so regularly, directing the manufacture of different size panels in order to maximize profits.[31] *Id.* ¶¶ 35-36. The commodity-like nature of TFT-LCD Products is further demonstrated by the existence of a spot market,[32] the lack of knowledge and general indifference of customers as to which manufacturer's panel is incorporated into a final product,[33] frequently changing prices,[34] and reliance on mutually agreed-upon specifications and industry standards to produce uniform, readily substitutable products.[35] *Id.* ¶¶ 42-45. Customers' acute sensitivity to price was shown by

[redacted].

[28] *See* Hiroyuki Morimitsu (Sharp), 159:5-23, 160:17-22 (Fastiff Decl., Exh. N) [redacted]; Kevin Yang (Chi Mei), 47:15-48:4 (Fastiff Decl., Exh. T) [redacted].

[29] CMO-USA-CIV-0495141 (Fastiff Decl., Exh. 37) [redacted].

[30] *See* Arthur Lu (HannStar), 86:12-87:1, 88:17-24 (Fastiff Decl., Exh. L) [redacted]; Nobuhiko Kobayashi (Hitachi), 14:16-15:25 (Fastiff Decl., Exh. I) [redacted]; Roy Yeh (Nexgen), 17:16-22 (Fastiff Decl., Exh. U) [redacted].

[31] *See* Jennifer Lin (AU Optronics), 34:24-35:10, 36:9-37:13 (Fastiff Decl., Exh. K) [redacted]; Arthur Lu (HannStar), 60:3-61:3 (Fastiff Decl., Exh. L) [redacted].

[32] *See* Marshall Pinder (Sharp), 71:6-72:5 (Fastiff Decl., Exh. P) [redacted].

[33] Samsung's "person most knowledgeable" testified that [redacted] Scott Birnbaum (Samsung), 217:2-13 (Fastiff Decl., Exh. A).

[34] *See* Yoong Ki Min (LG Display), 74:14-75:21 (Fastiff Decl., Exh. M) [redacted].

[35] An important standards organization was the Standard Panel Working Group ("SPWG"), which was endorsed by [redacted] Kevin Yang (Chi Mei), Exhibits 10 and 11

their frequent insistence on "most favored customer" contract terms.[36]

As Dr. Flamm explains, when products are interchangeable, producers compete for customers almost exclusively on the basis of price, and price constitutes the dominant consideration for purchasers seeking a supplier. *Id.* ¶ 47. To Dr. Flamm, consistent with well-accepted economic principles, and well-supported by the evidence adduced to date, the interchangeable or fungible nature of TFT-LCD panels and products makes the industry susceptible to collusive activity. *Id.* ¶¶ 24, 43, 47; *see also* Part II.B.1, *supra*.

b. Defendants Systematically Fixed the Prices of TFT-LCD Panels

As the recent depositions of defendants' executives confirm,[37] every manufacturer of TFT-LCD panels relied on centralized and/or formulaic pricing practices or procedures that allowed a relatively small number of individual employees, many of whom participated directly in Crystal Meetings or other price-fixing events, to control prices. While the precise mechanics of enforcement may have differed from defendant to defendant, the top management of each defendant set internal base prices—in the cartel's vernacular the "target" or "floor" prices—and then required their sales representatives to impose those prices. At LG Display, [redacted]. *See* Yoong-Ki Min (LG Display), 74:14-75:21 (Fastiff Decl., Exh. A). United States sales representatives had little or no discretion to vary from the dictates of the steering committee or strike a deal below the target price. At HannStar,[38]

(Fastiff Decl, Exh. 38 and 39). [redacted]. *Id.* at 82:14-83:10 (Fastiff Decl., Exh. T). [redacted] K.Y. Hung (HannStar), Exhibit 8 (Fastiff Decl., Exh. 40).

[36] *See* Scott Birnbaum (Samsung), 210:17-211:9 (Fastiff Decl., Exh. A) [redacted]; Marshall Pinder (Sharp), Exhibits 7 and 11 (Fastiff Decl., Exh. 41 and 42) [redacted]; Joyce Pan (AU Optronics), 130:4-131:6 (Fastiff Decl., Exh. O) [redacted]

[37] Discovery in this case is still in its initial stages. No defendant has finished production of documents. The defendant depositions to date have been Rule 30(b)(6) depositions covering a narrow list of class certification topics.

[38] "[redacted]

Samsung,[39] Chi Mei Optoelectronics,[40] AU Optronics,[41] and Hitachi, similar procedures enforced the fix on panel prices. Individual sales representatives were not permitted to deviate from the base price. Top-ranking executives in East Asia, seeking to preserve or enlarge profit margins, often reviewed and changed prices for potential United States sales.[42]

c. Defendants' Agreement Included Setting Base Prices

The discovery to date reveals that defendants entered into anticompetitive agreements to set base prices for the main sizes of panels. Defendants set these prices on a monthly and quarterly basis. They agreed not to price below these agreed-upon base prices when setting list prices and when negotiating sales with customers. And they intended for the agreed-upon prices to apply to the entire TFT-LCD market, to all products and purchasers. For example, defendants reached agreement during a 2001 meeting:

[redacted]

CPT004015 (Fastiff Decl., Exh. 7) (emphasis added). The minutes of another conspiratorial meeting state:

[redacted]

[redacted]" K.Y. Hung (HannStar), 104:3-8 (Fastiff Decl., Exh E). The company president had to authorize any rebates. *Id.* at 119:16-19.

[39] *See* Scott Birnbaum (Samsung), 87:2-25 (Fastiff Decl., Exh. A) [redacted]

[40] *See* Fumiaki Kunimoto (Chi Mei), 86:12-87:5; (Fastiff Decl., Exh. J) [redacted]

[41] *See* Joyce Pan (AU Optronics), 54:21-55:1, 63:14-64:1 (Fastiff Decl., Exh. O) [redacted]

[42] Kevin Yang (Chi Mei), 49:9-52:2, 53:18-54:10 (Fastiff Decl., Exh. T) [redacted]; Tadashi Yamada (Hitachi), 144:22-151:10 (Fastiff Decl., Exh. S) [redacted]

CPT0004010 (Fastiff Decl., Exh. 5) (emphasis added). In addition to setting floor prices, target prices, and price intervals, defendants agreed on formulas to use in setting base prices for panel sizes that were not explicitly discussed at the cartel meetings, so that defendants could readily calculate and set base prices for those other panel sizes as well.[43]

Defendants' collusive setting of base prices for standard TFT-LCD panel sizes—the prices from which all other TFT-LCD pricing was derived—suffices to establish common impact.

> The proof necessary to demonstrate that defendants conspired to maintain an inflated "base" from which all pricing negotiations began and that this "base" price was higher than the "base" price which would have been established by competitive conditions *would be common to all members of the class*. Proof of a conspiracy to establish a "base" price would establish at least the fact of damage, even if the extent of the actual damages suffered by the plaintiffs would vary. . . . [T]he proof with respect to the "base" price from which these negotiations began, or the structure of the conspiracy to affect individual negotiations, would be common to the class.

EPDM, 2009 WL 395131, at *7 (emphasis in original) (quoting *In re NASDAQ Market-Makers Antitrust Litig.*, 169 F.R.D. 493, 523 (S.D.N.Y. 1996) ("*NASDAQ*")). In other words, the jury can reasonably conclude that each Class member suffered injury if the evidence shows that the starting point for negotiations as to the ultimate price paid would have been lower in a competitive market. *See Rubber Chemicals*, 232 F.R.D. at 352 (class-wide impact found where defendants fixed artificially high list prices that "prove the fact of impact, even if the degree of impact differed between products and purchasers" because prices for all products negotiated from fixed list prices would also be artificially inflated) (quoting *Citric Acid*, 1996 WL 655791, at *7).

d. Plaintiffs Can Show Through Generalized Evidence That Defendants' Agreements to Fix the Price of TFT-LCD Panels Raised the Price of TFT-LCD Products

Plaintiffs can prove common impact with respect to purchases of TFT-LCD products as well as TFT-LCD panels. The record shows that, as defendants intended, the cartel's ability to fix and maintain the price of TFT-LCD panels allowed them to fix the price of finished TFT-LCD products. For the collusively set price of the panels dictated the price of the products. The TFT-

[43] *See* CPT0004008 (Fastiff Decl., Exh. 5) [redacted]

LCD panel is the single most important component in TFT-LCD products. According to Sharp's person most knowledgeable, [redacted]. *See* Bob Scaglione (Sharp), 78:11-79:15 (Fastiff Decl., Exh. Q). *See also supra*, p. 10 fn. 12.

As a factual matter, defendants' awareness and regular analysis of "street prices" of finished TFT-LCD panels indicates their pricing of panels was meant to control and did control the prices of finished products as well. *See* CPT0004041 (Fastiff Decl., Exh. 43) [redacted]. To enforce the conspiracy, panels sold by vertically integrated makers of TFT-LCD finished products to affiliated companies were priced using formulas similar to those used to set prices for third-party transactions. Defendants reminded each other to account for intra-company panel sales at the agreed-upon supracompetitive prices, lest their own product prices undercut the product prices charged by the members of the direct purchaser Class. *See* CPT0004008-4011 (Fastiff Decl., Exh. 5) [redacted] Thus, even when panel-manufacturing subsidiaries "sold" panels to finished product-manufacturing parent companies, the cost of the panel was heavily factored into the price of the finished good. For example, when Sharp's Audio Visual Systems Group sold TFT-LCD panels to its parent Sharp Corporation, the costs of panel production [redacted]. *See* Hiroyuki Morimitu (Sharp), 78:17-79:9, 87:5-13, 90:23-91:8 (Fastiff Decl., Exh. N).[44]

As a matter of law, courts routinely certify classes of purchasers of components and finished products. *See In re Flat Glass Antitrust Litig.*, 191 F.R.D. 472, 475 (W.D. Pa. 1999)

[44] *See also* Tamaki Iwamiya (Hitachi), 104:16-24 (Fastiff Decl, Exh. G) [redacted]; CMO-USA-CIV-0011319 (Fastiff Decl, Exh. 44) [redacted]

(certifying class of purchasers of flat glass and "all products subsequently fabricated therefrom" because flat glass was the main cost component of finished products); *Thomas & Thomas*, 209 F.R.D. at 166-67 (finding common impact on direct purchasers of carbon fiber and prepeg, a product largely made from carbon fiber). To "deny recovery" in this type of situation—when defendants fixed input costs in unreasonable restraint of trade with the intent and effect of driving up ultimate product prices—would be to open a "gaping hole in the administration of the antitrust laws. It would allow the price-fixer of a basic commodity to escape the reach of a treble-damage penalty simply by incorporating the tainted element into another product." *In re Sugar Industry Antitrust Litig.*, 579 F.2d 13, 18 (3d Cir. 1978).

e. Defendants' and Publicly Available Data Show That Prices for TFT-LCD Panels and Products Were Highly Correlated and Moved Together During the Class Period

In addition to analyzing the structure of the TFT-LCD industry and the pricing practices and procedures that defendants followed, Dr. Flamm performed an empirical analysis of defendants' non-aggregated transactional data. The latter analysis demonstrates that if the cartel existed and agreements to collude occurred, then the cartel would have successfully inflated the prices paid by all direct purchasers of TFT-LCD Products during the Class Period. Flamm ¶¶ 74-84. This conclusion follows from the data indicating that defendants' pricing behavior was aligned such that prices followed the same pattern over time for all TFT-LCD panels and products. *See id.* Exhs. 15-16. Dr. Flamm's empirical analysis lends further support to plaintiffs' allegations of concerted action. And the guilty pleas, of course, are evidence that the cartel existed, that agreements occurred, and that prices were raised and fixed.

Dr. Flamm conducted a price-indices analysis using the transactional and pricing data to analyze whether prices for different types of TFT-LCD panels and products moved together over time. Dr. Flamm concludes that the prices for TFT-LCD panels and products during the Class Period exhibit a high degree of correlation. *Id.* ¶ 84. This is evidence that the alleged price-fixing conspiracy affected all purchasers of TFT-LCD Products. As set forth above, defendants' own documents show that prices for finished products were driven by prices for panels, that defendants intended for their agreements on panel prices to affect product prices, and that this did

in fact happen. *See* CPT0004050 (Fastiff Decl., Exh. 45) [redacted]

4. Factual Variations Among Plaintiffs' Claims Do Not Defeat Their Showing of Class-Wide Impact

As in virtually every other price-fixing case, defendants will contend there are class members who bought a variety of products, at a variety of prices, at various times, under a variety of contracts and in a variety of circumstances. They will argue there is no conceivable way plaintiffs can prove class-wide impact. As in virtually every other such case, this argument should be rejected. There are several reasons. First, that some Class members may have paid higher or lower prices for TFT-LCD Products does not preclude certification. "Neither a variety of prices nor negotiated prices is an impediment to class certification if it appears that plaintiffs may be able to prove at trial that . . . the price range was affected generally." *NASDAQ*, 169 F.R.D. at 523. Even in cases where prices differed substantially, courts in this district have rejected arguments that antitrust conspiracy classes should not be certified. Indeed, such arguments have "uniformly been rejected by the courts." *Meijer*, 2008 WL 4065839, at *9 (citing *Cardizem*, 200 F.R.D. at 318-19).[45]

Nor would the existence of diverse products preclude class certification. For example, in *Citric Acid*, Judge Smith certified a class on a price-fixing claim despite "[c]ontentions of infinite diversity of product, marketing practices, and pricing"—contentions that the court noted "have been made in numerous cases and rejected." 1996 WL 655791, at *7 ("Diversity of products and pricing does not necessarily mean that plaintiffs cannot show class-wide impact") (citation omitted). "In price-fixing cases, courts repeatedly have held that the existence of the conspiracy is the predominant issue and warrants certification even where significant individual issues are present." *Thomas & Thomas*, 209 F.R.D. at 167.

[45] *See also In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651, 656 (7th Cir. 2002) ("An agreement to fix list prices is . . . a per se violation of the Sherman Act even if most or for that matter all transactions occur at lower prices."); *Rubber Chemicals*, 232 F.R.D. at 352-53 ("class-wide impact is usually found to exist where the defendants are shown to have used collusively-set list prices," even if some class members negotiated discounts).

5. Plaintiffs Will Prove Class-Wide Damages on a Common Basis

As with liability and impact, damages to this Class can be proved through common evidence. At this preliminary stage of the proceedings, "plaintiffs do not have to supply a precise damage formula." *Rubber Chemicals*, 232 F.R.D. at 354. A proposed method for determining damages is adequate unless it is "so insubstantial as to amount to no method at all." *DRAM*, 2006 WL 1530166, at *10. Various techniques for calculating overcharge damages, such as a "before and after" analysis or a correlation analysis, can satisfy this modest requirement. *See Rubber Chemicals*, 232 F.R.D. at 353; *DRAM*, 2006 WL 1530166, at *10; 3 *Newberg on Class Actions* § 10.3 ("Aggregate class proof of monetary relief may also be based on sampling techniques or other reasonable estimates, under accepted rules of evidence.").

Dr. Flamm concludes that it is possible to formulaically calculate the overcharge to each Class member on a class-wide basis using well-accepted methodologies. Flamm ¶ 107. He also concludes that the information necessary to perform this calculation exists in defendants' databases and is the kind of information routinely used by TFT-LCD producers in the ordinary course of business. *Id.* ¶¶ 95-96.

Dr. Flamm suggests using any of five possible econometric analyses of TFT-LCD panels and products that take into account various characteristics of the panels and products to maximize accuracy, including sophisticated forms of multiple regression analysis. *Id.* ¶¶ 85-90. Courts have consistently found multiple regression analysis, which accounts for the value of different attributes of a product, to be workable and particularly reliable, and have used it to calculate antitrust damages. In *In re Polypropylene Carpet Antitrust Litigation*, 996 F. Supp. 18 (N.D. Ga. 1997), the court certified a class that asserted a price-fixing claim, and the expert's proposed multiple regression analysis to calculate overcharge damages filled a central role in the decision:

> Multiple regression analysis is a statistical tool for understanding the relationships among two or more "variables," which are defined as "anything that can take on two or more values." Use of a regression analysis is valuable in numerous situations in which simple statistics will not suffice, including many . . . antitrust suits. . . . [M]ultiple regression allows one to choose among alternative hypotheses and to sort out those correlations that are spurious from those that are not. Thus, multiple regression analysis is a device designed to sift through various factors in order to assess as accurately as possible the influence of any one of them.

Id. at 26 (internal quotation marks and citations omitted).[46] Dr. Flamm proposes alternative ways of determining the amount of antitrust overcharge, measuring the difference between what plaintiffs paid and what they would have paid but for defendants' conspiracy. Flamm ¶¶ 85-90. Total class-wide damages will be calculated by subtracting what plaintiffs would have paid from what they did pay, as shown by defendants' records. *Id.* ¶ 107.

Courts have held repeatedly that the eventual need to determine individual damages for each class member does not defeat the predominance requirement of Rule 23(b)(3). *See Blackie*, 524 F.2d at 905 ("The amount of damages is invariably an individual question and does not defeat class action treatment.").[47] Individualized issues with respect to the calculation of damages do not preclude class certification. *See* 15 U.S.C. § 15d (upon "a determination that a defendant agreed to fix prices . . . damages may be proved and assessed in the aggregate by statistical or sampling methods, by the computation of illegal overcharges, or by such other reasonable system of estimating aggregate damages as the court in its discretion may permit without the necessity of separately proving the individual claim of, or amount of damage to, persons on whose behalf the suit was brought.").

Plaintiffs need not prove, in the case of purchases of finished products from co-conspirators or affiliates, what percentage of the illegal overcharge on panels was in the price of the finished product. *See Royal Printing*, 621 F.2d at 327 ("Determining what portion of the illegal overcharge was 'passed on' to [plaintiff] and what part was absorbed by the middlemen would involve all the evidentiary and economic complexities that *Illinois Brick* clearly forbade.") (citing *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977)). Accordingly, a plaintiff who purchases from a co-conspirator or corporate affiliate of the price-fixer is entitled to recover "the entire

[46] *See also EPDM*, 2009 WL 395131, at *14 (the "Supreme Court has already accepted the use of multiple regression analysis"); *Bulk Graphite*, 2006 WL 891362, at *15 (in price-fixing case, recognizing multiple regression analysis as "widely accepted").

[47] *See also Allapattah Servs., Inc. v. Exxon Corp.*, 333 F.3d 1248, 1261 (11th Cir. 2003), *rehearing en banc denied*, 362 F.3d 739 (11th Cir. 2004) (stating that "numerous courts have recognized that the presence of individualized damages issues does not prevent a finding that the common issues in the case predominate."); *VisaCheck/MasterMoney II*, 280 F.3d at 140 (noting that "if defendants' argument [that the need for individualized proof of damages precludes class treatment] were uncritically accepted, there would be little if any place for the class action device in the adjudication of antitrust claims.") (citations omitted).

overcharge," even at the risk of "multiple liability" for the defendant. *Royal Printing*, 621 F.2d at 327.

Moreover, the burden of proof for damages in an antitrust case is lower than the burden of proof with regard to impact. *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 565-66 (1931). The damages burden requires only a showing that the proposed methods for calculating damages are not "so insubstantial as to amount to no method at all." *SRAM*, 2008 WL 4447592, at *7. Denying plaintiffs a recovery because the way a conspirator structured its interrelated manufacturing, distribution, and sales functions prevents damages from being shown with precision "would enable the wrongdoer to profit by his wrongdoing at the expense of his victim. . . . The most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created." *Bigelow v. RKO Radio Pictures, Inc.*, 327 U.S. 251, 264-65 (1946); *In re Scrap Metal Antitrust Litig.*, No. 1:02 CV 0844, 2006 WL 2850453, at *15 n.41 (N.D. Ohio Sept. 30, 2006) (same); *In re Sumitomo Copper Litig.*, 182 F.R.D. 85, 93 n.11 (S.D.N.Y. 1998) (same).

Dr. Flamm has presented workable methodologies for determining damages, and has shown exactly how the methodologies will be applied to the evidence produced in this case, thus establishing that class-wide damages can be determined through common proof.

6. A Class Action Is the Superior and Most Efficient Method for Adjudicating This Case

Rule 23(b)(3) requires that class resolution be "superior to other available methods for the fair and efficient adjudication of the controversy." Fed. R. Civ. P. 23(b)(3). The superiority analysis from *SRAM* applies here as well: "In antitrust cases such as this, the damages of individual direct purchasers are likely to be too small to justify litigation, but a class action would offer those with small claims the opportunity for meaningful redress." 2008 WL 4447592, at *7; *see also Brand Name Prescription*, 1994 WL 663590, at *6 ("We fail to see the logic in defendants' contention that 50,000 individual actions are less complex than a single class action."); Wright, Miller & Kane, *Federal Practice and Procedure: Civil Procedure* § 1781, at 254-55 (3d ed. 2004) ("if common questions are found to predominate in an antitrust action,

then courts generally have ruled that the superiority prerequisite of Rule 23(b)(3) is satisfied.").

The prosecution of separate actions by individual direct purchasers would create the risk of inconsistent rulings, and could result in prejudice to plaintiffs. *See* Transcript of 1/14/09 Hearing, at 18:8-9 (Request for Judicial Notice, Exh. A) (in Chunghwa's criminal plea colloquy, Court agreed "not to impose restitution on account of the pending civil actions"); Transcript of 2/17/09 Hearing, at 24:14-18 (Request for Judicial Notice, Exh. K) (in criminal plea colloquy with LG Display executive, Court stated it was waiving restitution "in light of the civil actions which are pending"); *see also* the terms of the joint sentencing memoranda regarding Chunghwa, LG Display, and Sharp as well as non-corporate defendants, attached as Exhibits B through H to the Request for Judicial Notice. A class action is a superior method for achieving restitution here.

D. Direct Purchaser Plaintiffs Have a Workable Plan for Trying This Case on a Class-Wide Basis

While a trial plan is not required at the class certification stage,[48] plaintiffs present the following proposal to show that a class trial is superior to individual trials. There should be a single trial of the direct purchaser case, divided into two phases, with the same sitting jury: (1) a liability and antitrust injury phase; and (2) a damages phase. A verdict would conclude each phase.

The first phase will include common evidence of defendants' price-fixing agreements to show that a conspiracy existed. The evidence will further show that the conspiracy had a generalized impact on plaintiffs, *i.e.*, that Class members suffered consequent antitrust injury. Plaintiffs will also present common evidence, through expert testimony and econometric analyses, to prove the amount of damages suffered by the Class, and will ask the jury to determine the percentage overcharge paid by the Class as a result of the conspiracy.

In the second phase, the jury will determine the total sales to the Class during the Class

[48] *See Chamberlain v. Ford Motor Co.*, 402 F.3d 952, 961 n.4 (9th Cir. 2005) ("Nothing in the [2003] Advisory Committee Notes [to Rule 23] suggests grafting a requirement for a trial plan onto the rule."); *Ellis v. Costco Wholesale Corp.*, 240 F.R.D. 627, 644 (N.D. Cal. 2007) (in granting the plaintiffs' motion for class certification, the court held premature their request to approve a trial plan in conjunction with the class certification motion).

Period and apply the percentage overcharge to that amount in order to determine the total damages to the Class. The jury would not be asked to allocate any recovery to individual Class members. That is an issue best handled by the Court through a claims process. Planning to allocate damages after trial does not prevent the Court from certifying the proposed Class. *See In re Sugar Industry Antitrust Litig.*, 73 F.R.D. 322, 353 (E.D. Pa. 1976) ("Upon the establishment of such aggregate damages as may be assessed against defendants, the problem of allocations among class and distribution within each class largely become a plaintiff's problem, which should not militate against certification of these classes").

CONCLUSION

For all the foregoing reasons, plaintiffs respectfully request that the Direct Purchaser Plaintiffs' Motion for Class Certification be granted and that their counsel, Mr. Simon (and his firm) and Mr. Heimann (and his firm), be appointed Class Counsel pursuant to Rule 23(g).

Respectfully submitted,

Dated: April 3, 2009

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Pursuant to General Order 45, Part X-B, the filer attests that concurrence in the filing of this document has been obtained from Bruce L. Simon.

APPENDIX A

Plaintiffs and Proposed Class Representatives

Plaintiff	Description of TFT-LCD Purchases	Purchased From
A&M Photo & Imaging Center, Inc.	Purchased TFT-LCD notebook computer for personal / business use.	Defendant Toshiba America Information Systems, Inc.
CMP Consulting Services, Inc.	Purchased TFT-LCD notebook computers for resale.	Defendant Toshiba America Information Systems, Inc.
Crago, Inc.	Purchased TFT-LCD computer monitors for resale.	Defendant Nexgen Mediatech USA, Inc.
Home Technologies Bellevue LLC	Purchased TFT-LCD televisions for resale.	Defendant Sharp Electronics Corporation
Nathan Muchnick, Inc.	Purchased TFT-LCD televisions for resale.	Affiliate / co-conspirator Matsushita Electric Corporation of America
Omnis Computer Supplies, Inc.	Purchased TFT-LCD computer monitors for business use.	Affiliate / co-conspirator LG Electronics U.S.A., Inc.
Orion Home Systems, LLC	Purchased TFT-LCD televisions for resale.	Affiliate / co-conspirator LG Electronics U.S.A., Inc.
Phelps Technologies, Inc.	Purchased TFT-LCD panels for product development.	Defendant Sharp Electronics Corporation
Royal Data Services, Inc.	Purchased TFT-LCD computer monitors for resale.	Defendant Tatung Company of America, Inc.
Texas Digital Systems, Inc.	Purchased TFT-LCD panels for use in manufacturing restaurant menu boards.	Defendant Sharp Electronics Corporation
Univisions-Crimson Holding, Inc.	Purchased TFT-LCD televisions, monitors, and projectors for resale.	Affiliate / co-conspirator LG Electronics U.S.A., Inc.; co-conspirator NEC; defendant Samsung; defendant Sharp Electronics Corporation; defendant Toshiba
Weber's World Company	Purchased TFT-LCD televisions and computer monitors for resale.	Defendant Sharp Electronics Corporation; co-conspirator Mitsubishi Digital Electronics America, Inc.; affiliate / co-conspirator LG Electronics U.S.A., Inc.